## ATP BAA O&As

- **Q 1:** Would it be of significant concern to the reviewers that this would be our first government grant/contract?
- **A 1:** This is usually not a concern. It is the technology that is the prime consideration of the reviewers.
- **Q 2:** Our technical focus is on generating antibodies for therapeutics/diagnostics. However we do not have existing expertise in the design/manufacture of biosensors themselves (i.e. the medical device). Does this DARPA BAA require that we deliver both or is it sufficient for AnaptysBio to develop/deliver the technology by which DARPA can then move forward with a biosensor device?
- **A 2:** On page 6 of the BAA we state "Proposers are expected to provide sufficient quantities of their modified antibody molecules in a format that permits an independent Government laboratory to assess the degree to which the goals for improved stability and controllable affinity have been achieved". The antibodies will be tested by the government.
- **Q 3:** It is mentioned in the BAA that DARPA is interested in a viral antibody molecule. Does this terminology include the use of antibody or antibody-like fragments or is DARPA interested in only the stabilization of full antibodies? If so, is there a preference between monoclonal or polyclonal?
- **A 3:** Page 6: Deliverables Phase 1: "Performers will provide for testing a minimum of 1 gram each of their modified stability and affinity antibody molecule." Monoclonal antibody is preferred.
- **Q 4:** For stability, is DARPA interested in the use of external matrices (i.e. polymers) for stabilizing viral antibody molecule?
- **A 4:** Stability and affinity capabilities must be on the same molecule.
- **Q 5:** As for affinity, is DARPA interested in other methods (i.e. electrical, mechanical, etc.) beside actual physical changes (i.e. mutations) to the antibody in order to affect affinity?
- **A 5:** Page 7: "The primary objectives for the Phase II ATP are focused on demonstrating that the strategies developed under the Phase I program can work cooperatively in a single "master" antibody molecule that achieves both the high stability and controllable affinity metrics demonstrated in Phase I."
- **Q 6:** By reading the announcement, it seems a proposal needs to cover all technical areas in both phases. Will a proposal that only covers one of the technical areas (area 1) in phase I be considered at all?
- A 6: Page 4: "DARPA seeks innovative, two-phase proposals that incorporate all the following..."
- **Q 7:** Would it be possible to apply based on an alternative approach that does not use antibodies, but addresses the key goals of Phase I?
- **A 7:** The BAA is focused on Antibody Technology.

- **Q 8:** The "RFA" is looking for ways to make thermostable antibodies with tunable affinity. Will proposals to construct antibodies that are not comprised of polypeptides be considered seriously?
- **A 8:** Page 4: "...DARPA is soliciting....that address ...for developing and demonstrating antibody modification strategies..."
- **Q 9:** I am a new assistant professor. I do not have an established research group (yet) and therefore things like naming 'key personnel' and describing their skills will be a challenge for me to do in the timeframe of this grant proposal deadline. As someone who is 'starting' a research group, will I be taken seriously as an investigator capable of directing the research described?
- **A 9:** As long as you have met the qualifications as stated in the BAA the proposal will be considered.
- **Q 10:** Are there any guidelines at all regarding scope/size of funding?
- **A 10:** The budget should be reasonable for the tasks to be performed.
- **Q 11:** For the ATC, we wanted to know if DARPA would provide an antibody or just its sequence (or nothing at all, maybe we pick our own pet antibody), and same for the antigen. In short, what will DARPA provide for phase I?
- **A 11:** The specific antibody and antigen information to be used in this program will be provided due to national security reasons.
- Page 6: "...proposers may assume that the Government will provide antibodies and specific viral antigen and/or the antigen sequence along with fragment genetic sequences from the variable region of the antibody."
- **Q 12:** Please clarify if the  $K_d$  (dissociation constant) goal is  $< 10^{-8}$  or is  $K_d < 10^{-8}$  M the goal?
- **A 12:** Page 5: "Strategies for demonstrating controllable antibody affinity...should result in the ability to tune antibody affinity, as measured by the disassociation constant  $(K_d)$ , to a value of  $10^8$ , or the enhancement of at least two orders of magnitude increase in affinity of the antibody (provided by the Government). The binding constant for the antibody will also be provided by the Government."
- **Q 13:** Will antigen be supplied in Phase II?
- **A 13:** Antigen or sequence will be supplied. No publications since sensor types not yet determined.
- **Q 14:** Can you supply any details about existing biosensors or biosensor platforms that will be tested in Phase II? Are there any publications describing these biosensors?
- **A 14:** Biosensors will be determined.
- **Q 15:** What is the proposed chemistry of coupling of the antibody to the surface?

- **A 15:** This information should not affect the technological approach in the proposal. The antibody itself will be modified
- **Q 16:** Will the antigen be carbohydrate or protein or protein?
- **A 16:** This information should not affect the technological approach to the problem.
- **Q 17:** How many sequences will be provided in Phases 2 and 3?
- **A 17:** There will be a single antigen and antibody.
- **Q 18:** During what Phase must we show multiplexing ability?
- **A 18:** We are not asking for multiplexing ability.
- **Q 19:** Is DARPA Interested in warm base manufacturing?
- **A 19:** If this is the way you will achieve the goals of the proposal, then propose it in the full proposal.
- **Q 20:** Can UK-based companies submit proposals to the Antibody Technology Program DARPA-BAA-09-69?
- **A 20:** Per the BAA, "Foreign participants and/or individuals may participate to the extent that such participants comply with any necessary Non-Disclosure Agreements, Security Regulations, Export Control Laws, and other governing statutes applicable under the circumstances."